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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/613,159 | 07/03/2003 | Yong Yang | 9896--000001 | 9189 |

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| EXAMINER |
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JUNG, DAVID YIUK

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| ART UNIT | PAPER NUMBER |
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2134

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/08/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/613,159

Applicant(s)

YANG ET AL.

Examiner

David Y. Jung

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date ____.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

CLAIMS PRESENTED

Claims 1-5 are presented.

CLAIM REJECTIONS

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Cisco
(<http://www.cisco.com/univercd/cc/td/doc/product/software/ios112/intercpt.htm>),
copyright 1998, Cisco Systems.

Cisco teaches A method for preventing Transmission Control Protocol (TCP)
synchronize (SYN) package flood attacks

-- see Section Description, i.e., preventing flood attacks

, comprising the steps of:

(1) a firewall having received a TCP SYN connection request package
from a client, creating a TCP SYN response package for the client and returning
to the client by the firewall as an agent of a server, informing the client not to
send data packages by the TCP SYN response package;

-- see Figure 20, arrival of connection attempts, retransmissions to clients

(2) detecting whether having received a TCP SYN acknowledgement package from the client, if yes, creating a TCP SYN connection request package for the server and sending to the server by the firewall as an agent of the client, otherwise discarding the TCP SYN connection request package from the client;

-- see Figure 20, when finished with third client, send and transmit to server

-- see Figure 20, retransmit to first two clients, time out, send resets

(3) having received a TCP SYN response package from the server, creating a TCP SYN acknowledgement package for the server and returning to the server,

at same time, creating a TCP SYN acknowledgement package for the client and sending to the client, and initiating data transmission by the TCP SYN acknowledgement package;

-- see Figure 20, server responds, the connection is established, send final ACK

(4) forwarding data packages coming from the client to the server by the firewall as an agent of the client, and forwarding data packages coming from the server to the client by the firewall as an agent of the server

-- see Figure 19, TCP Intercept acts as firewall, forwarding all packets to and from client 171.69.232.23 and server 10.1.1.30..

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2134

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cisco (<http://www.cisco.com/univercd/cc/td/doc/product/software/ios112/intercpt.htm>).

Regarding claims 2-5, Cisco teaches as noted in the previous paragraphs.

These passages of Cisco do not teach the various protocol handlings in the sense of the claims 2-5.

Nevertheless, it was well known in the art to have the various protocol handlings of claims 2-5 for the motivation of having an effective defense against denial of service.

In particular, regarding claim 2, such use of zero window size is well known in the art for the motivation of minimizing the traffic between unauthorized client and the firewall. If the window size is anything other than zero, the flood would work and the service would be denied.

Regarding claim 3, such address handling is well known in the art for the motivation of certifying the client. The addresses must be certified for the authorization of the client to occur.

Regarding claim 4, such use of non-zero window is well known in the art for the motivation of permitting the traffic. After authorization, as in the situation of claim 4, the window must be non-zero for traffic to be permitted.

Regarding claim 5, such handling of source sequence number handling is well known in the art for the motivation of permitting the traffic. After authorization, as in the situation of claim 5, the sequence numbers must be coordinated in order for the traffic to be permitted.

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to modify Cisco for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Conclusion

The art made of record and not relied upon is considered pertinent to applicant's disclosure. The art disclosed general background.

Points of Contact

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

(571) 273-3836 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Jung whose telephone number is (571) 272-3836 or Kambiz Zand whose telephone number is (272) 272-3811.

David Jung

Patent Examiner

A handwritten signature in black ink, consisting of a large, stylized loop followed by a horizontal line that tapers off to the right.

3/4/07